

## Abstract

A platelet collecting apparatus 1 comprises a centrifugal separator 20 possessing a rotatable rotor 142 ;  
5 a first line 21 for allowing the flow of the blood entering the centrifugal separator 20; a second line 22 for allowing the flow of the blood emanating from the centrifugal separator, a plasma collecting bag 25 connected to the first line 21 and the second line 22 so as to collect the plasma emanating  
10 from the centrifugal separator 20 and return the collected plasma to the centrifugal separator 20, a platelet collecting bag 26 connected to the second line 22 so as to collect the platelets emanating from the centrifugal separator 20, a blood delivering pump 11 disposed in the first line 21, and a  
15 controller 13 for controlling the operation of the rotor of the centrifugal separator 20 and the operation of the blood delivering pump 11. The controller 13 is endowed with a function of varying the rotational frequency of the rotor 142 during the course of blood collection in conformity with the amount  
20 of the blood entered into the centrifugal separator 20 via the first line 21.